

ABSTRACT

Is provided a resonant cavity type light emitting diode having excellent humidity durability and a light output unsaturated even several 10 mA., which is suitable for mass production. The semiconductor light emitting element has a resonator formed by one set of multi-layer reflecting films disposed at a constant distance on a GaAs substrate inclined at an angle of not less than 2 degrees in the direction [011] or [0-1-1] from the plane (100) and a light emitting layer disposed at a loop position of a standing wave in the resonator, wherein a multi-layer reflecting film disposed on the GaAs substrate side is composed of plural layers of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ ($0 \leq x \leq 1$) and a multi-layer reflecting film disposed on the opposite side of the GaAs substrate is composed of plural layers of $\text{Al}_y\text{Ga}_z\text{In}_{1-y-z}\text{P}$ ($0 \leq y \leq 1, 0 \leq z \leq 1$), thereby achieving an improved humidity durability and an increased reflection factor by increasing the number of the reflection layers.